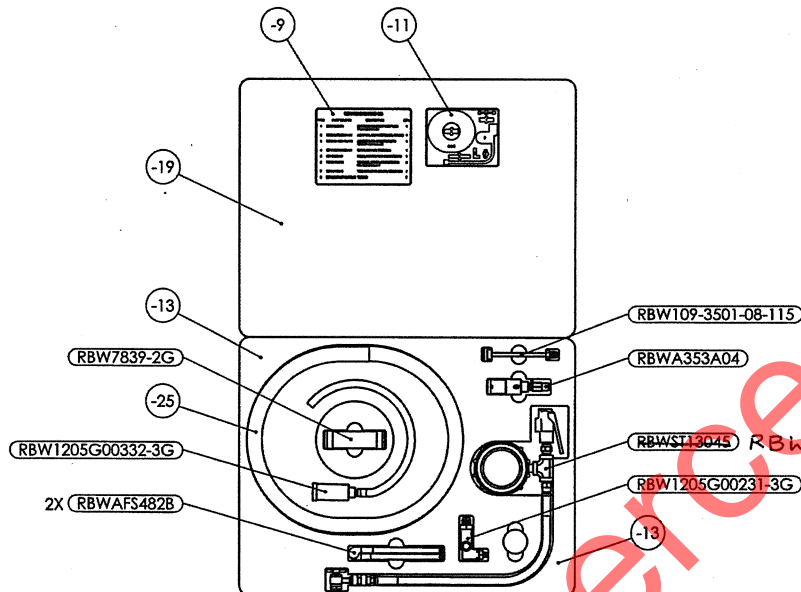


This drawing, specifications, and concepts contained here in are the sole property of DART Aerospace, and may not be reproduced or used in any fashion without the prior written permission of DART Aerospace Eugene, OR.



REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		ADDED -19 TOOL TOP CUSHION AND PAGE 4.	4/31/2010	WP	RW
2		ADDED RADI TO L SHAPE CUT OUT FOR BETTER FINGER ACQUISITION.	5/6/2010	WP	RW
3		DELETED -1A, -1B, -1C FROM BOTTOM CUSHION & ATTACHED TO HOSE. DELETED Ø6.00 CUTOUT FROM CENTER OF BOTTOM CUSHION. CHD DEPTH OF HOSE CUT OUT FROM 4.75 TO 3.75. CHD CENTER POST FROM Ø8.25 TO Ø3.50 TO ALLOW MORE ROOM FOR HOSES. CHD BOM T/N -1, -3, & -5. CHD -15 FROM IM2700 CASE. CORRECTED -3 P/N FROM RBW109-3501-08-115.	4/21/2011	RJC	DW
4		SHT 3 UPDATED -7 CUTOUT. SHT. 4 ADDED CUTOITS FOR TIRE INFLATOR. REMOVED FROM BOX.	12/27/2011	JAG	
5		-11 MODIFIED PLACARD TO MATCH BOTTOM TOOL CUSHION -13 MODIFIED CUTOUT FOR TIRE INFLATOR. ADDED CUTOUT FOR -1. MOVED CUTOITS FOR FIT.	4/25/2012	JAG	
6		CORRECTED -19 Ø1.20 HOLE CUT OUT LOCATION 180° TO FIT LID PROPERLY.	9/24/2012	RJC	SE
7		-11 MODIFIED PLACARD FOR RBW7839-2G. -13 (FOAM) MODIFIED CUTOUT Ø TO ALLOW FOR RBW7839-2G. -19 CHD PLACARD CUTOUT DEPTH WAS Ø7 S. 125	1/17/2013	BIM	SE
8		REDRAWN IN SOLIDWORKS. -9 CORRECTED ITEM -3 T/N WAS RBW109-351-08-115 IS RBW109-3501-08-115. ADDED -21 & -23 RIVET AND WASHER FOR PLACARD. -9 & -11 WAS B/O IS MANUFACTURED. -19 CHD LOCATION OF CUTOUT ON BACKSIDE.	10/14/2013	JAG	RW
9	17-0122	CHD DRAWING NUMBER WAS RBW1205G00131-3G IS RBW1205G00132-3G. UPDATED TO NEW STANDARD. -1 REPLACED W/ RBWAFS482B. -2 REPLACED W/ RBW1205G00231-3G. -3 REPLACED W/ RBW109-3501-08-115. -4 REPLACED W/ RBW1205G00332-3G. -5 REPLACED W/ RBW7839-2G. -6 REPLACED W/ RBWAFS482B. -7 REPLACED W/ RBWST13045. -9 DELETED DIMS ARIAL SIZE 1/8. ARIAL SEE 3/11. CHD DIM WAS (Ø4) IS .Ø4. CHD TOLERANCES WAS ±.010. WAS ±.01 IS ±.003. ADDED ITEM 8 TUBING TO PLACARD. -11 ADDED ITEM #8. CHD DIM WAS (Ø4) IS .Ø4. CHD TOLERANCES WAS ±.005 IS ±.010. WAS ±.01 IS ±.003. -13 REDESIGNED TO FIT -25. CHD DIMS WAS Ø.50 IS Ø.50. WAS Ø.50 IS Ø.50. CHD B/O REF WAS 5.83 X 14.42 X 18.87 I.R. SPECIALTY IS 6.40 X 17.21 X 20.30 (CASE SOLUTIONS). CHD MATL WAS Y20 BLACK IS ETHAFOAM 220 BLACK. CHD TOLERANCES WAS ±.005 IS ±.010. WAS ±.01 IS ±.003. CHD DIM WAS 4X R.50 IS 10X R.50. DELETED DIM 2X R.50. ADDED DIM Ø1.00. -18 CHD B/O REF WAS #APP-1610-E IS #APP-1610-E. -17 REPLACED W/ RBW1011. -19 CHD B/O REF WAS 1.73 X 14.22 X 18.63 I.R. SPECIALTY IS 2.01 X 17.21 X 22.30 (CASE SOLUTIONS). CHD MATL WAS Y20 BLACK IS ETHAFOAM 220 BLACK. REDESIGNED TO FIT IN LARGER CASE. CHD TOLERANCES WAS ±.005 IS ±.010. WAS ±.01 IS ±.003. -25 TUBING ADDED TO BOM QTY 1.	6/19/2017	DPD	JAG
19-543		ITEM #7 WAS RBWST13045 IS RBWST13045	1/31/2019	PK	PK

SEE ATTACHED DEVIATION

ASSY QTY	B/O	Part #	QTY.	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
		1		PMC OIL FILLING QUICK DISCONNECT	RBWA353A04		1
		1		ADAPTER, M/R DAMPER OIL FILLING	RBW1205G00231-3G		1
		1		ADAPTER, L/G SHOCKSTRUTS NITROGEN CHARGE	RBW109-3501-08-115		1
		1		HOSE, MGB OIL DRAINING	RBW1205G00332-3G		1
		1		HOSE, IGB & TGB OIL DRAINING	RBW7839-2G		1
		2		WRENCH, WHEEL BRAKE RESER COVER REM/INST	RBWAFS482B		1
		1		TIRE INFLATOR GAUGE, NITROGEN	RBWST13045 RBWST13045		1
		-9	1	CONTENTS PLACARD	PLASTIC		2
		-11	1	LOCATION PLACARD	PLASTIC		3
	B/O	-13	1	BOTTOM FOAM	ETHAFOAM 220, BLACK	8.40 X 17.21 X 20.30 (CASE SOLUTIONS)	4
	B/O	-15	1	CASE	PLASTIC	PELICAN #APP-1610-E	N/S
	B/O	-19	1	TOP FOAM	ETHAFOAM 220, BLACK	2.01 X 17.21 X 22.30 (CASE SOLUTIONS)	5
	B/O	-25	1	TUBING	PVC W/ POLYESTER BRAID	Ø3/4 I.D. X Ø1-1/32 O.D. X 10FT, DUROMETER 70A (MCMASTER-CARR #52373K34)	1
	B/O		1	DART PLACARD	ALUMINUM	RB41011	N/S

UNDER REVIEW  
ECR: HB ECR 223

NOTE:  
REF. AGUSTA T/N: 3G1205G00132.

<b>DART</b> AEROSPACE													
TITLE <b>HELICOPTER SERVICING KIT</b>													
DWG NO. <b>RBW1205G00132-3G</b>	REV <b>9</b>												
<table border="1"> <tr> <td>MATL</td> <td>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FRAT</td> <td>XXX ± .005 FRACTIONS 1/8</td> </tr> <tr> <td>DEC</td> <td>XX ± .01 ANGLES ± 1°</td> </tr> <tr> <td>SPEC</td> <td>X ± .1 SURFACES = 125</td> </tr> </table>		MATL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	FRAT	XXX ± .005 FRACTIONS 1/8	DEC	XX ± .01 ANGLES ± 1°	SPEC	X ± .1 SURFACES = 125				
MATL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES												
FRAT	XXX ± .005 FRACTIONS 1/8												
DEC	XX ± .01 ANGLES ± 1°												
SPEC	X ± .1 SURFACES = 125												
<table border="1"> <tr> <td>DRAWN BY:</td> <td>PERRITT</td> </tr> <tr> <td>CHECKED:</td> <td>RJC 07/10/2017</td> </tr> <tr> <td>OPPS APPR:</td> <td>AA 07/14/2017</td> </tr> <tr> <td>QA APPR:</td> <td>JL 07/19/2017</td> </tr> <tr> <td>APPROVED:</td> <td>JAG 07/20/2017</td> </tr> <tr> <td>SCALE</td> <td>1:8</td> </tr> </table>		DRAWN BY:	PERRITT	CHECKED:	RJC 07/10/2017	OPPS APPR:	AA 07/14/2017	QA APPR:	JL 07/19/2017	APPROVED:	JAG 07/20/2017	SCALE	1:8
DRAWN BY:	PERRITT												
CHECKED:	RJC 07/10/2017												
OPPS APPR:	AA 07/14/2017												
QA APPR:	JL 07/19/2017												
APPROVED:	JAG 07/20/2017												
SCALE	1:8												
<table border="1"> <tr> <td colspan="2">1. BREAK ALL SHARP EDGES Ø12 X 45° OR Ø18</td> </tr> <tr> <td colspan="2">2. DIMENSIONAL LIMITS APPLY AFTER PLAYING</td> </tr> <tr> <td colspan="2">3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td colspan="2">USED ON MODEL AGUSTA AW139</td> </tr> </table>		1. BREAK ALL SHARP EDGES Ø12 X 45° OR Ø18		2. DIMENSIONAL LIMITS APPLY AFTER PLAYING		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		USED ON MODEL AGUSTA AW139					
1. BREAK ALL SHARP EDGES Ø12 X 45° OR Ø18													
2. DIMENSIONAL LIMITS APPLY AFTER PLAYING													
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009													
USED ON MODEL AGUSTA AW139													
SHEET 1 OF 5													

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	
8		-9 CORRECTED ITEM -3 1/N WAS RBW109-351-08-115 IS RBW109-3501-08-115.	10/15/2013	CFS	RW	
9	17-0122	-9 DELETED DIMS ARIAL SIZE 1/8, ARIAL SIZE 3/16, CHD DIM WAS (.06) IS .04. CHD TOLERANCES WAS $\pm .005$ IS $\pm .010$ , WAS $\pm .01$ IS $\pm .03$ . ADDED ITEM 8 TUBING TO PLACARD.	6/19/2017	DPD	JAG	

**SEE ATTACHED DEVIATION**

4X R.13

BLACK BACKGROUND W/  
WHITE LINES & LETTERS

RBW1205G00132-3G				
ITEM	PART NUMBER	DESCRIPTION	QTY.	
1	RBWA353A04	QUICK DISCONNECT COUPLING PCM OIL FILLING	1	
2	RBW1205G00231-3G	ADAPTER, M/R DAMPER OIL FILLING	1	
3	RBW109-3501-08-115	ADAPTER, LG SHOCKSTRUTS NITROGEN CHARGE	1	
4	RBW1205G00332-3G	HOSE, MGB OIL DRAINING	1	
5	RBW7839-2G	HOSE, KGB AND TGB OIL DRAINING	1	
6	RBWAF8482B	WRENCH, WHEEL BRAKE RESEB COVER RELINIST	2	
7	RBW5TI3645 RBW5T13048	TIRE INFLATOR GAUGE, NITROGEN	1	
8	RBW1205G00132-3G-2B	TUBING	1	

PK

5.00

6.25

.06

**UNDER REVIEW**  
**ECR: HB ECR 223**

⑨

CONTENTS PLACARD

PK

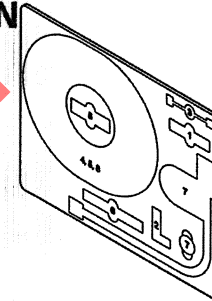
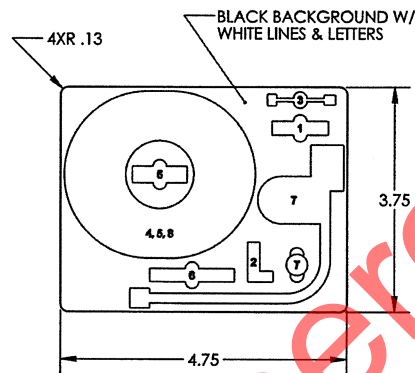
<b>DART</b> AEROSPACE	
TITLE HELICOPTER SERVICING KIT	
DWG NO. RBW1205G00132-3G-9	REV 9
MAT'L PLASTIC	UNLESS OTHERWISE SPECIFIED
REAR	DIMENSIONS ARE IN INCHES
FRONT	XXX $\pm .010$ FRACTIONS $\pm 1/8$
FINISH	XX $\pm .03$ ANGLES $\pm 1^\circ$
SPEC	X $\pm .1$ SURFACES = 125
DRAWN BY: SMITH	1. BREAK ALL SHARP EDGES
CHECKED: RJC 07/10/2017	.015 $\times 45^\circ$ OR .018
OPPS APPR: AA 07/14/2017	2. DIMENSIONAL LIMITS APPLY
QA APPR: JL 07/19/2017	AFTER PLATING
APPROVED: JAG 07/20/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:2	USED ON MODEL
DATE 10/14/2013	AGUSTA AW139
SHEET 2 OF 5	

J

This drawing, specifications, and concepts contained here in are the sole property of DART Aerospace, and may not be reproduced or used in any fashion without the prior written permission of DART Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
9	17-0122	-11 ADDED ITEM #8. CHD DIM WAS (.06) IS .06. CHD TOLERANCES WAS $\pm .005$ IS $\pm .010$ , WAS $\pm .01$ IS $\pm .03$ .	6/19/2017	DPD	JAG

**SEE ATTACHED DEVIATION**



**UNDER REVIEW**  
**ECR: HB ECR 223**

(-11)  
LOCATION PLACARD

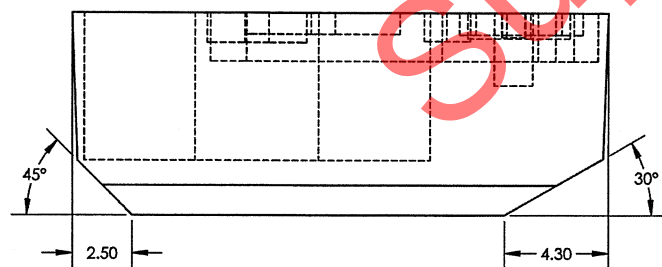
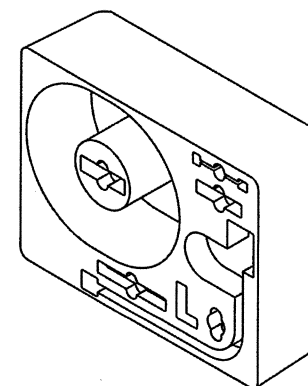
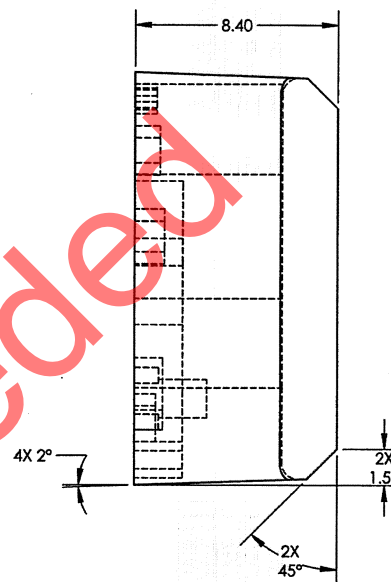
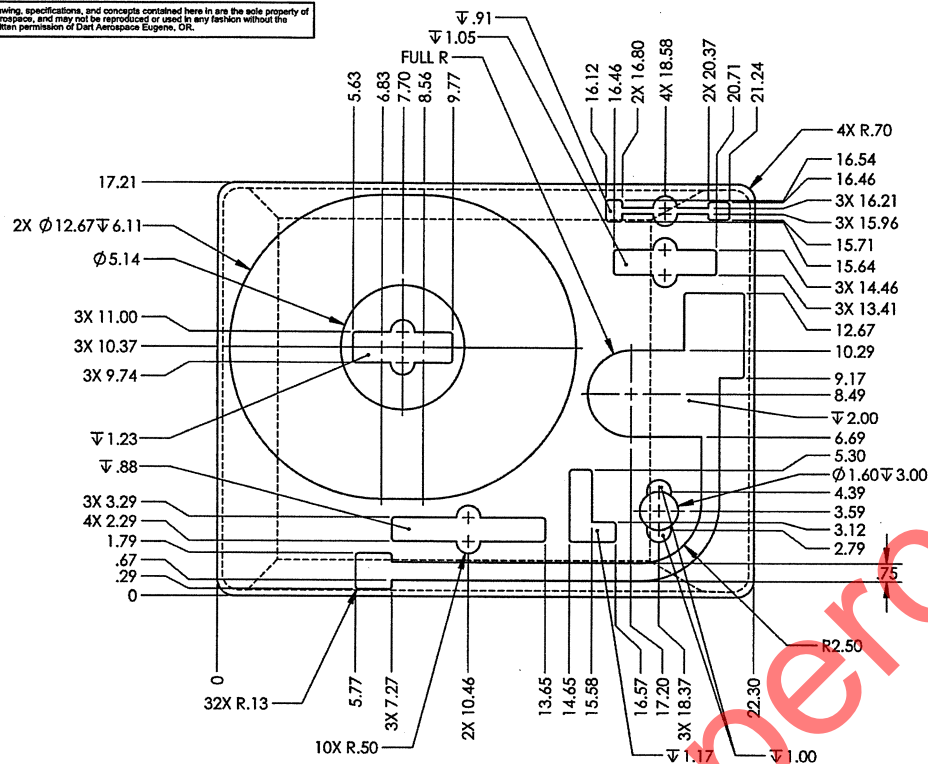
<b>DART</b> AEROSPACE	
TITLE HELICOPTER SERVICING KIT	
DWG NO. RBW1205G00132-3G-11	REV 9
MATERIAL PLASTIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TEXT XXX $\pm .010$ FRACTIONS $\pm .10$	ANGLES $\pm 1^\circ$
FINISH XX $\pm .03$	SURFACES $\pm .125$
SPEC X $\pm .1$	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: SMITH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: RJC 07/10/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: AA 07/14/2017	USED ON MODEL
QA APPR: JL 07/19/2017	AGUSTA AW139
APPROVED: JAG 07/26/2017	
SCALE 1:2	DATE 10/14/2013 SHEET 3 OF 5

PK

J

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS			DATE	INITIAL	APPROVED
REV	ECR	DESCRIPTION			
9	17-0122	-13 REDESIGNED TO FIT -25. CHD DIMS WAS $\pm .50$ IS $\pm 1.00$ . WAS $\pm .43$ IS $\pm .91$ . CHD B/O REF WAS 5.83 X 14.42 X 18.87 LR. SPECIALTY IS 8.40 X 17.21 X 20.30 (CASE SOLUTIONS). CHD MATL WAS Y20 BLACK IS ETHAFOAM 220 BLACK. CHD TOLERANCES WAS $\pm .003$ IS $\pm .010$ . WAS $\pm .01$ IS $\pm .03$ . CHD DIM WAS 4X R.50 IS 10X R.50. DELETED DIM 2X R.50 $\pm .50$ . ADDED DIM $\pm 1.00$ .	6/19/2017	DPD	JAG



(-13)  
BOTTOM FOAM

UNDER REVIEW  
ECR: HB ECR 223

SEE ATTACHED DEVIATION

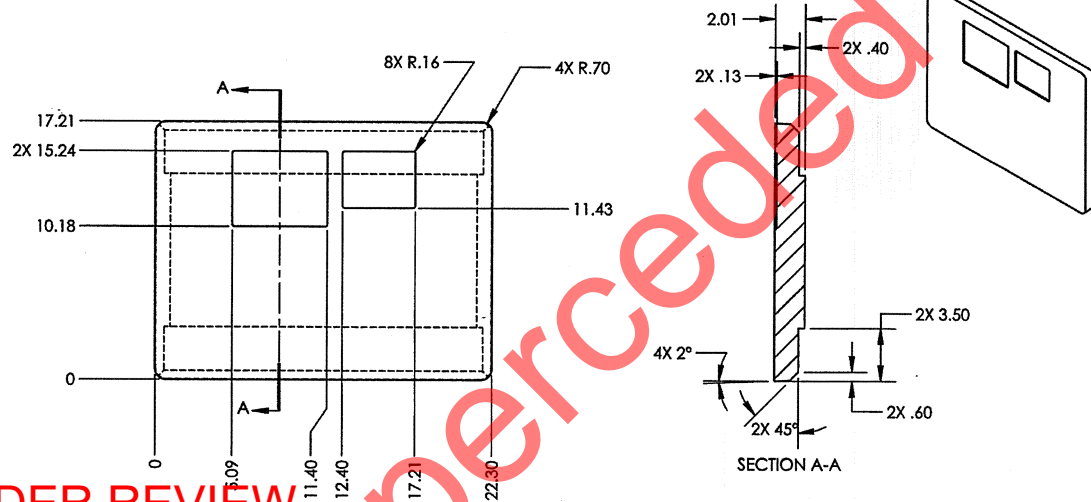
<b>DART AEROSPACE</b>	
TITLE: HELICOPTER SERVICING KIT	
DWG NO. RBW1205G00132-3G-13	REV 9
MATL: ETHAFOAM 220, BLACK	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
FEAT: $\pm .010$	FRACTIONS $\pm 1/8$
FINISH: $\pm .03$	ANGLES $1^\circ$
SPEC: $\pm .1$	SURFACES = 125
1. BREAK ALL SHARP EDGES	
2. DIMENSIONAL LIMITS APPLY	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
AGUSTA AW139	
DRAWN BY: PERRITT	DATE: 4/20/2010
CHECKED: RJC 07/10/2017	SHEET 4 OF 5
OPPS APPR: AA 07/14/2017	
QA APPR: JL 07/19/2017	
APPROVED: JAG 07/20/2017	
SCALE: 1:5	

PK

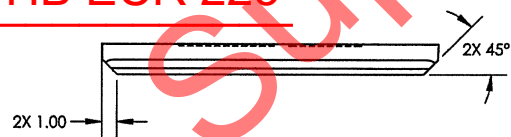
This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REV		DESCRIPTION		DATE	INITIAL	APPROVED
9	17-0122	-19 REDESIGNED TO FIT IN LARGER CASE. CHD TOLERANCES WAS $\pm .005$ IS $\pm .010$ , WAS $\pm .01$ IS $\pm .03$ . CHD B/O REF WAS 1.73 X 14.22 X 18.63 I.R. SPECIALTY IS 2.01 X 17.21 X 22.30 (CASE SOLUTIONS). CHD MATL WAS Y20 BLACK IS ETHAFOAM 220 BLACK.		6/19/2017	DPD	JAG

SEE ATTACHED DEVIATION



UNDER REVIEW  
ECR: HB ECR 223



(-19)  
TOP FOAM

<b>DART AEROSPACE</b>	
TITLE: HELICOPTER SERVICING KIT	
DWG NO. RBW1205G00132-3G-19	REV 9
MAT'L: ETHAFOAM 220, BLACK	
FINISH: .000 $\pm$ .010 FRACTIONS $\pm$ 10	UNLESS OTHERWISE SPECIFIED
FINISH: .000 $\pm$ .010 FRACTIONS $\pm$ 10	DIMENSIONS ARE IN INCHES
FINISH: .000 $\pm$ .010 FRACTIONS $\pm$ 10	ANGLES $\pm$ 1°
FINISH: .000 $\pm$ .010 FRACTIONS $\pm$ 10	SURFACES $\pm$ 125
SPEC:	
DRAWN BY: PERRITT	1. BREAK ALL SHARP EDGES
CHECKED: RJC 07/10/2017	.015 $\times$ 45° OR .015R
OPPS APPR: AA 07/14/2017	2. DIMENSIONAL LIMITS APPLY
QA APPR: JL 07/19/2017	AFTER PLATING
APPROVED: JAG 07/20/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE: 1:8	USED ON MODEL
DATE: 4/20/2010	AGUSTA AW139
SHEET 5 OF 5	

PK

Entered: \_\_\_\_\_ Date: \_\_\_\_\_

# WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



NCR No. \_\_\_\_\_

Route update only ☐

Job: _____ Part No. <u>RBW1205G00132-3G Rev. 9</u>		<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>		<b>DEPARTMENT/PROCESS</b> Skid-tube <input type="checkbox"/> Cross tube <input type="checkbox"/> Eng. (Non-AW) <input type="checkbox"/> Engineering <input type="checkbox"/> Machining <input type="checkbox"/> Small Fab <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Water Jet <input type="checkbox"/> Large Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier Quality <input type="checkbox"/>			
Date : _____		Sequence #: _____		QTY Affected : _____		MRB (OS1042) <i>M. Lee</i> Oct 30, 2018	
Description Work Order Deviation				Disposition			
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)  <div style="color: red; font-size: 1.2em; font-weight: bold;">UNDER REVIEW</div> <div style="color: red; font-size: 1.2em; font-weight: bold;">ECR: <u>HB ECR 223</u></div>				Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush.			
				Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable).			
				This deviation is acceptable.			
				The fit, form and function of the part will be as originally intended.			
<b>Root Cause</b> Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Preservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input checked="" type="checkbox"/> X Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/>		<b>FAULT CATEGORY</b> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;">           Pressure/Forced <input type="checkbox"/>            Bending <input type="checkbox"/>            Crushing <input type="checkbox"/>            Cracks <input type="checkbox"/>            Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/>            Marks/Chatter <input type="checkbox"/>            Mislabeled <input type="checkbox"/> </div> <div style="width: 50%;">           Contamination <input type="checkbox"/>            Misaligned/off center <input type="checkbox"/>            BOM/Route <input type="checkbox"/>            Broken/Damage/Defect <input type="checkbox"/>            Incomplete/Unclear Instructions <input type="checkbox"/>            Drill Holes <input type="checkbox"/>            Fit/Function <input type="checkbox"/> </div> <div style="width: 50%;">           Power Loss/Surge <input type="checkbox"/>            Folio/Program <input type="checkbox"/>            Grain Direction <input type="checkbox"/>            Weld <input type="checkbox"/>            Wrong Stock Pulled <input type="checkbox"/>            Out of Sequence <input type="checkbox"/>            Off-set/Set-up <input type="checkbox"/> </div> <div style="width: 50%;">           Positioned Wrong <input type="checkbox"/>            Outside Tolerance <input type="checkbox"/>            Drawing <input type="checkbox"/>            Finish <input type="checkbox"/>            Part Lost/Missing <input type="checkbox"/>            Misread <input type="checkbox"/> </div> </div>					
		Other/Details: _____					